

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,809	04/13/2001		Jose Rojas-Chapana	2694-0131P	4836
2292	7590	09/17/2002			
BIRCH STE	WART KO	LASCH & BIF	EXAMINER		
PO BOX 747				BOS, STEVEN J	
FALLS CHURCH, VA 22040-0747					
				ART UNIT	PAPER NUMBER
				1754	11
				DATE MAILED: 09/17/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-11

Office Action Summary

Application No. 09/744,809

Applicant(s)

Rojas-chapana et al

Examiner

Steven Bos

Art Unit 1754

The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.						
- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the						
mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.						
If NO period for reply is specified above, the maximum statutory period will apply a Failure to reply within the set or extended period for reply will, by statute, cause the	nd will expire SIX (6) MONTHS from the mailing date of this communication.					
- Any reply received by the Office later than three months after the mailing date of t						
earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on Apr 13, 2	001					
2a) ☐ This action is FINAL. 2b) ☑ This act	ion is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.						
Disposition of Claims						
4) 💢 Claim(s) <u>1-8</u>	is/are pending in the application.					
4a) Of the above, claim(s)	is/are withdrawn from consideration.					
5) Claim(s)	is/are allowed.					
6) 💢 Claim(s) <u>1-8</u>	is/are rejected.					
7) Claim(s)	is/are objected to.					
8)	are subject to restriction and/or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are	a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the d	rawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11) The proposed drawing correction filed on	is: a) $\square$ approved b) $\square$ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Exami	ner.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) 💢 All b) 🗆 Some* c) 🗀 None of:						
1. Certified copies of the priority documents have	e been received.					
2. Certified copies of the priority documents have been received in Application No.						
3. 💢 Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
*See the attached detailed Office action for a list of th	e certified copies not received.					
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).						
a) The translation of the foreign language provisional application has been received.						
15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413) Paper No(s).					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) Notice of Informal Patent Application (PTO-152)					
3) X Information Disclosure Statement(s) (PTO-1449) Paper No(s). 6, 10	6) Other:					

Application/Control Number: 09/744809

Art Unit: 1754

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, "using microorganisms ... genus" is indefinite as to how they are used, ie. are they used for barter or for sale for the required microorganisms?

In claims 1-6,8, "characterized in that" is awkward and confusing.

In claims 1-3, "the leaching fluid" lack(s) proper antecedent basis in the claim(s).

In claim 1, "said compounds" lack(s) proper antecedent basis in the claim(s).

In claim 1, proper Markush language is suggested.

In claim 2, "these compounds" lack(s) proper antecedent basis in the claim(s).

In claim 3, "said compounds" lack(s) proper antecedent basis in the claim(s).

In claim 3, "the discharging fluid" lack(s) proper antecedent basis in the claim(s).

In claim 4, "the aqueous leaching fluid" lack(s) proper antecedent basis in the claim(s).

In claim 4, "<" should be replaced with the corresponding language description.

In claim 5, "the leaching fluid" lack(s) proper antecedent basis in the claim(s).

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as"

Application/Control Number: 09/744809

Art Unit: 1754

and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 5 recites the broad recitation 1-4, and the claim also recites 1.5-2.0 which is the narrower statement of the range/limitation.

In claim 6, "is used" is indefinite as explained above.

In claim 7, "said compounds" lack(s) proper antecedent basis in the claim(s).

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. In the present instance, claim 8 recites the broad recitation sulfidic ores, and the claim also recites pyrite which is the narrower statement of the range/limitation.

Claims 1-6 provides for the use of microorganisms of the Thiobacillus genus, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Application/Control Number: 09/744809 Page 4

Art Unit: 1754

Claims 1-6 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claims 7,8 provides for the use of amino acids, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 7,8 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Application/Control Number: 09/744809 Page 5

Art Unit: 1754

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Rusin '624.

See cols. 9,10,12,14.

Claims 7,8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wenberg,

et al. or Liu, et al. See pp. 208,210 and Table 5; pp. 1542,1544, respectively.

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Steven Bos whose telephone number is (703) 308-2537. The examiner is on

the increased flexitime program schedule. The FAX No. for After Final amendments is 703-872-

9311; for all others it is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven Bos

Primary Examiner

Art Unit 1754